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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,372	02/25/2004	Takashi Amano	36992.00108 (HAL 266)	7976
30256	7590	09/13/2006	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P			CAO, CHUN	
600 HANSEN WAY			ART UNIT	
PALO ALTO, CA 94304-1043			PAPER NUMBER	

2115

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/787,372	Applicant(s) AMANO, TAKASHI	
	Examiner Chun Cao	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 11-16 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Mari (Mari), JP publication no. 08-046685.

As per claim 1, Mari discloses a data storage system [fig. 1], comprising:

a first data storage medium for storing data, the first data storage medium currently configured as an accessible medium [English translation paragraphs 0010, 0016];

a second data storage medium for storing a copy of the data, the second data storage medium currently configured as a standby medium [English translation paragraphs 0010, 0016];

first configuration information defining a switching trigger when the first data storage medium currently configured as the accessible medium becomes the standby medium and when the second data storage medium currently configured as the standby

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medium becomes the accessible medium; and a data storage system manager using the first configuration information to control the switching [fig. 1; English translation paragraphs 0017, 0020].

As per claim 2, Mari discloses that the first data storage medium and second data storage medium are each in a power-saving state [English translation paragraphs 0016, 0017].

As per claim 3, Mari discloses that the accessible medium is in a power-saving mode [English translation paragraphs 0016, 0017].

As per claim 4, Mari discloses that the standby medium is in a power-saving mode [English translation paragraphs 0016, 0017].

As per claim 5, Mari discloses that the standby medium is in a power-off mode [English translation paragraphs 0016, 0017].

As per claim 6, Mari discloses that the accessible medium is read-only [English translation paragraph 0010].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 7-10 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mari (Mari), JP publication no. 08-046685 in view of Guha et al. (Guha), US patent no. 7,035,972.

As per claim 7, Mari does not explicitly disclose that the switching trigger includes a time period. In other word, the two data storage media were alternately turned on/off in a time period.

Guha discloses that the switching trigger includes a time period, such that two disk drives are alternately powered [col. 10, lines 4-6; col. 14, lines 23-29].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Mari and Guha because they both disclose power control for data storage system, and the specify teachings of Guha stated above would optimize the performance and reliability of Mari system for prolonging the life of the data storages.

As per claim 8, Guha discloses that switching trigger includes an equation of access time [col. 9, lines 48-59; col. 10, lines 22-29].

As per claim 9, Guha discloses that the switching trigger includes an administrative request [col. 15, line 66-col. 16, line 5].

As per claim 10, Guha discloses that a third data storage device for storing a copy of the data, the third data storage device currently configured as a standby medium [col. 16, lines 33-36; fig. 1].

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As to claims 11-20, Claims 1-10 basically are the corresponding elements that are carried out the method of operating steps in claims 11-20. Accordingly, claims 11-20 are rejected for the same reason as set forth in claims 1-10.

As per claim 21 is written in mean plus function and contained the same limitations as claim 1. Therefore, same rejection is applied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sep. 8, 2006



**CHUN CAO
PRIMARY EXAMINER**